3/17/2008. Dialog Search 10680407

```
RESUMED UPDATING
***File 156, ToxFile
***File 120, U.S. Copyrights
            ***
RELOADS COMPLETED
***Files 154 & 155, MEDLINE (annual reload)
***Files 72 & 73, EMBASE
            ***
FILES REMOVED
***Files 359,959,804,  Chemical Economics Handbook
***Files 360,960, Specialty Chemicals Update Program
            ***
 >>>For the latest news about Dialog products, services, content<<<
 >>>and events, please visit What's New from Dialog at         <<<
 >>>http://www.dialog.com/whatsnew/.  You can find news about   <<<
 >>>a specific database by entering HELP NEWS <file number>.    <<<
YTEXT is set ON as an alias for 15,16,148,160,275,621
KTEXT is set ON as an alias for 9,20,476,610,613,624,634,636,810,813
MTEXT is set ON as an alias for 2,35,65,77,99,233,256,278,474,475,583
STEXT is set ON as an alias for 623,473,47,635,570,PAPERSMJ,PAPERSEU
HTEXT is set ON as an alias for 625,268,626,267,139
FTEXT1 is set ON as an alias for 15,9,275,621,636,16,160,148
FTEXT2 is set ON as an alias for 610,810,476,624,634,20,47
BIB1 is set ON as an alias for 35,139,583,65,2,144,233,474,475,99
SUB26 is set ON as an alias for PAPERSEU, PAPERSMJ,570,635
SUB35 is set ON as an alias for 625,268,626,267,608
* * *
SYSTEM:HOME
Cost is in DialUnits
Menu System II: D2 version 1.8.0 term=ASCII
              *** DIALOG HOMEBASE(SM) Main Menu ***

 Information:
  1.  Announcements (new files, reloads, etc.)
  2.  Database, Rates, & Command Descriptions
  3.  Help in Choosing Databases for Your Topic
  4.  Customer Services (telephone assistance, training, seminars, etc.)
  5.  Product Descriptions

 Connections:
  6.  DIALOG(R) Document Delivery
  7.  Data Star(R)
```

```
   (c) 2003 Dialog, a Thomson business.      All rights reserved.

    /H = Help           /L = Logoff         /NOMENU = Command Mode


Enter an option number to view information or to connect to an online
 service.  Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).
? b 410

      17mar08 00:30:13 User264721 Session D27.1
          $0.00    0.265 DialUnits FileHomeBase
    $0.00  Estimated cost FileHomeBase
    $0.00  Estimated cost this search
    $0.00  Estimated total session cost   0.265 DialUnits

File 410:Dialog Comm.-of-Interest Newsletters 2007 /Mar
      (c) 2008 Dialog

     Set  Items  Description
     ---  -----  -----------
? set hi %%%;set hi %%%
HILIGHT set on as ''
HILIGHT set on as ''
? b YTEXT, KTEXT, MTEXT,  STEXT, HTEXT, ftext1, ftext2, bib1, sub26, sub35
>>>          77 does not exist
>>>         233 does not exist
>>>2 of the specified files are not available
      17mar08 00:30:21 User264721 Session D27.2
          $0.00    0.115 DialUnits File410
    $0.00  Estimated cost File410
    $0.03  TELNET
    $0.03  Estimated cost this search
    $0.03  Estimated total session cost   0.380 DialUnits

SYSTEM:OS  - DIALOG OneSearch
  File  15:ABI/Inform(R) 1971-2008/Mar 14
        (c) 2008 ProQuest Info&Learning
  File  16:Gale Group PROMT(R) 1990-2008/Mar 11
        (c) 2008 The Gale Group
*File  16: Because of updating irregularities, the banner and the
update (UD=) may vary.
  File 148:Gale Group Trade & Industry DB 1976-2008/Feb 28
        (c)2008 The Gale Group
*File 148: The CURRENT feature is not working in File 148.
```

```
See HELP NEWS148.
  File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
  File 275:Gale Group Computer DB(TM) 1983-2008/Mar 10
         (c) 2008 The Gale Group
  File 621:Gale Group New Prod.Annou.(R) 1985-2008/Feb 28
         (c) 2008 The Gale Group
  File   9:Business & Industry(R) Jul/1994-2008/Mar 13
         (c) 2008  The Gale Group
  File  20:Dialog Global Reporter 1997-2008/Mar 16
         (c) 2008 Dialog
  File 476:Financial Times Fulltext 1982-2008/Mar 16
         (c) 2008 Financial Times Ltd
  File 610:Business Wire 1999-2008/Mar 03
         (c) 2008 Business Wire.
*File 610: File 610 now contains data from 3/99 forward.
Archive data (1986-2/99) is available in File 810.
  File 613:PR Newswire 1999-2008/Mar 03
         (c) 2008 PR Newswire Association Inc
*File 613: File 613 now contains data from 5/99 forward.
Archive data (1987-4/99) is available in File 813.
  File 624:McGraw-Hill Publications 1985-2008/Mar 14
         (c) 2008 McGraw-Hill Co. Inc
*File 624: Homeland Security & Defense and 9 Platt energy journals added
Please see HELP NEWS624 for more
  File 634:San Jose Mercury  Jun 1985-2008/Mar 13
         (c) 2008 San Jose Mercury News
  File 636:Gale Group Newsletter DB(TM) 1987-2008/Mar 11
         (c) 2008 The Gale Group
  File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
  File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
  File   2:INSPEC 1898-2008/Feb W3
         (c) 2008 Institution of Electrical Engineers
  File  35:Dissertation Abs Online 1861-2008/Nov
         (c) 2008 ProQuest Info&Learning
  File  65:Inside Conferences 1993-2008/Mar 14
         (c) 2008 BLDSC all rts. reserv.
  File  99:Wilson Appl. Sci & Tech Abs 1983-2008/Jan
         (c) 2008 The HW Wilson Co.
  File 256:TecInfoSource 82-2008/Jun
         (c) 2008 Info.Sources Inc
  File 278:Ei Compendex(R) 1970-2008/Mar W1
         (c) 2008 Elsevier Eng.  Info. Inc.
  File 474:New York Times Abs 1969-2008/Mar 15
```

```
         (c) 2008 The New York Times
  File 475:Wall Street Journal Abs 1973-2008/Mar 15
         (c) 2008 The New York Times
  File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
*File 583: This file is no longer updating as of 12-13-2002.
  File 623:Business Week 1985-2008/Mar 14
         (c) 2008 The McGraw-Hill Companies Inc
  File 473:Financial Times Abstracts 1998-2001/Apr 02
         (c) 2001 The New York Times
*File 473: This file will not update after March 31, 2001.
It will remain on Dialog as a closed file.
  File  47:Gale Group Magazine DB(TM) 1959-2008/Mar 05
         (c) 2008 The Gale group
  File 635:Business Dateline(R) 1985-2008/Mar 15
         (c) 2008 ProQuest Info&Learning
  File 570:Gale Group MARS(R) 1984-2008/Mar 11
         (c) 2008 The Gale Group
  File 387:The Denver Post 1994-2008/Mar 12
         (c) 2008 Denver Post
  File 471:New York Times Fulltext 1980-2008/Mar 22
         (c) 2008 The New York Times
  File 492:Arizona Repub/Phoenix Gaz 19862002/Jan 06
         (c) 2002 Phoenix Newspapers
*File 492: File 492 is closed (no longer updating).  Use
Newsroom, Files 989 and 990, for current records.
  File 494:St LouisPost-Dispatch 1988-2008/Mar 16
         (c) 2008 St Louis Post-Dispatch
  File 631:Boston Globe 1980-2008/Mar 13
         (c) 2008 Boston Globe
  File 633:Phil.Inquirer 1983-2008/Mar 15
         (c) 2008 Philadelphia Newspapers Inc
  File 638:Newsday/New York Newsday 1987-2008/Mar 14
         (c) 2008 Newsday Inc.
  File 640:San Francisco Chronicle 1988-2008/Mar 16
         (c) 2008 Chronicle Publ. Co.
  File 641:Rocky Mountain News Jun 1989-2008/Mar 15
         (c) 2008 Scripps Howard News
  File 702:Miami Herald 1983-2008/Mar 14
         (c) 2008 The Miami Herald Publishing Co.
  File 703:USA Today 1989-2008/Mar 14
         (c) 2008 USA Today
  File 704:(Portland)The Oregonian 1989-2008/Mar 13
         (c) 2008 The Oregonian
  File 713:Atlanta J/Const. 1989-2008/Mar 13
         (c) 2008 Atlanta Newspapers
  File 714:(Baltimore) The Sun 1990-2008/Mar 14
       (c) 2008 Baltimore Sun
  File 715:Christian Sci.Mon. 1989-2008/Mar 17
       (c) 2008 Christian Science Monitor
  File 725:(Cleveland)Plain Dealer Aug 1991-2008/Mar 14
       (c) 2008 The Plain Dealer
  File 735:St. Petersburg Times 1989- 2008/Mar 16
       (c) 2008 St. Petersburg Times
  File 477:Irish Times 1999-2008/Mar 03
       (c) 2008 Irish Times
  File 710:Times/Sun.Times(London) Jun 1988-2008/Mar 16
       (c) 2008 Times Newspapers
  File 711:Independent(London) Sep 1988-2006/Dec 12
       (c) 2006 Newspaper Publ. PLC
*File 711: Use File 757 for full current day's news of the Independent, as
as well as full coverage of many additional European news sources.
  File 756:Daily/Sunday Telegraph 2000-2008/Mar 14
       (c) 2008 Telegraph Group
  File 757:Mirror Publications/Independent Newspapers 2000-2008/Feb 28
       (c) 2008
  File 625:American Banker Publications 1981-2008/Mar 14
       (c) 2008 American Banker
  File 268:Banking Info Source 1981-2008/Mar W2
       (c) 2008 ProQuest Info&Learning
  File 626:Bond Buyer Full Text 1981-2008/Mar 13
       (c) 2008 Bond Buyer
  File 267:Finance & Banking Newsletters 2008/Jan 28
       (c) 2008 Dialog
  File 139:EconLit 1969-2008/Feb
       (c) 2008 American Economic Association
  File 144:Pascal 1973-2008/Mar W1
       (c) 2008 INIST/CNRS
  File 608:KR/T Bus.News. 1992-2008/Mar 16
       (c)2008 Knight Ridder/Tribune Bus News

    Set  Items  Description
    ---  -----  -----------
? s auction and server and (first (w) round) and ((second or subsequent or next or
following) (1n) round) and ((withdrawal or switch) (5n) request)
Processing
Processing
Processing
Processing
Processed  10 of  59 files ...
Processing
Processed  20 of  59 files ...
```

```
Processing
Processed  30 of  59 files ...
Processing
Processed  40 of  59 files ...
Processing
Processed  50 of  59 files ...
Processing
Completed processing all files
         1219186  AUCTION
         2385623  SERVER
        50231179  FIRST
         5689007  ROUND
          902146  FIRST(W)ROUND
        23403198  SECOND
         2036278  SUBSEQUENT
        25406016  NEXT
        15045265  FOLLOWING
         5689007  ROUND
          782285  (((SECOND OR SUBSEQUENT) OR NEXT) OR
FOLLOWING)(1N)ROUND
          763991  WITHDRAWAL
         2019433  SWITCH
         3525623  REQUEST
            5324  (WITHDRAWAL OR SWITCH)(5N)REQUEST
      S1       0  AUCTION AND SERVER AND (FIRST (W) ROUND) AND ((SECOND
OR
                  SUBSEQUENT OR NEXT OR FOLLOWING) (1N) ROUND) AND
                  ((WITHDRAWAL OR SWITCH) (5N) REQUEST)
? s simultaneous (1n) descending (1n) clock (1n) auction
          760275  SIMULTANEOUS
          139418  DESCENDING
         1329910  CLOCK
         1219186  AUCTION
      S2      44  SIMULTANEOUS (1N) DESCENDING (1N) CLOCK (1N) AUCTION
? s2 and (multiple (2n) round
>>>Unmatched parentheses
? s2 and (multiple (2n) round)
Processing
Processing
Processed  10 of  59 files ...
Processing
Processed  30 of  59 files ...
Processing
Processed  50 of  59 files ...
Completed processing all files
        50591211  2
        5599947  MULTIPLE
        5689007  ROUND
           2068  MULTIPLE(2N)ROUND
     S3     879  2 AND (MULTIPLE (2N) ROUND)
? s s3 and s2
            879  S3
             44  S2
     S4       6  S3 AND S2
? s s2 and (multiple (2n) round)
             44  S2
        5599947  MULTIPLE
        5689007  ROUND
           2068  MULTIPLE(2N)ROUND
     S5       9  S2 AND (MULTIPLE (2N) ROUND)
? s rd s5
     S6       0  RD S5
? rd s5

>>>Duplicate detection is not supported for File 625.

>>>Duplicate detection is not supported for File 626.

>>>Records from unsupported files will be retained in the RD set.
     S7       4  RD S5  (unique items)
? s s7 and PD<20021008
>>>File 15 processing for PD=  : PD=20021008
>>>    started at PD=710000 stopped at PD=900103
>>>File 16 processing for PD=  : PD=20021008
>>>    started at PD=19900101 stopped at PD=19950623
>>>File 148 processing for PD=  : PD=20021008
>>>    started at PD=140105 stopped at PD=801121
>>>File 160 processing for PD=  : PD=20021008
>>>    started at PD=2103 stopped at PD=770314
>>>File 275 processing for PD=  : PD=20021008
>>>    started at PD=140103 stopped at PD=851101
>>>File 621 processing for PD=  : PD=20021008
>>>    started at PD=00000000 stopped at PD=19910208
>>>File 9 processing for PD=  : PD=20021008
>>>    started at PD=871119 stopped at PD=960615
Processing
>>>File 20 processing for PD=  : PD=20021008
>>>    started at PD=101004 stopped at PD=990223
Processing
>>>File 476 processing for PD=  : PD=20021008
>>>    started at PD=19820102 stopped at PD=19881015
Processed  10 of  59 files ...
```

```
Processing
>>>File 624 processing for PD=  : PD=20021008
>>>    started at PD=104 stopped at PD=900201
>>>File 634 processing for PD=  : PD=20021008
>>>    started at PD=12/7/04 stopped at PD=880302
>>>File 636 processing for PD=  : PD=20021008
>>>    started at PD=19880101 stopped at PD=19940325
>>>File 810 processing for PD=  : PD=20021008
>>>    started at PD=850116 stopped at PD=911123
>>>File 813 processing for PD=  : PD=20021008
>>>    started at PD=100000 stopped at PD=900805
>>>One or more prefixes are unsupported
>>>  or undefined in one or more files.
>>>File 99 processing for PD=  : PD=20021008
>>>    started at PD=DEC.1200 stopped at PD=19910204
>>>File 474 processing for PD=  : PD=20021008
>>>    started at PD=101111 stopped at PD=710902
>>>File 475 processing for PD=  : PD=20021008
>>>    started at PD=191111 stopped at PD=780512
>>>File 583 processing for PD=  : PD=20021008
>>>    started at PD=100001 stopped at PD=860828
Processed  20 of  59 files ...
>>>File 47 processing for PD=  : PD=20021008
>>>    started at PD=590100 stopped at PD=620114
Processing
>>>File 635 processing for PD=  : PD=20021008
>>>    started at PD=1190 stopped at PD=890200
>>>File 570 processing for PD=  : PD=20021008
>>>    started at PD=19840102 stopped at PD=19910623
>>>File 387 processing for PD=  : PD=20021008
>>>    started at PD=931204 stopped at PD=960921
>>>File 471 processing for PD=  : PD=20021008
>>>    started at PD=100904 stopped at PD=820418
>>>File 492 processing for PD=  : PD=20021008
>>>    started at PD=11/10/99 stopped at PD=890912
>>>File 494 processing for PD=  : PD=20021008
>>>    started at PD=2/7/2001 stopped at PD=900904
>>>File 631 processing for PD=  : PD=20021008
>>>    started at PD=11/14/99 stopped at PD=820813
>>>File 633 processing for PD=  : PD=20021008
>>>    started at PD=830101 stopped at PD=851123
>>>File 638 processing for PD=  : PD=20021008
>>>    started at PD=25, stopped at PD=890919
>>>File 640 processing for PD=  : PD=20021008
>>>    started at PD=850209 stopped at PD=900914
>>>File 641 processing for PD=  : PD=20021008
```

```
>>>     started at PD=890523 stopped at PD=920205
>>>File 702 processing for PD=  : PD=20021008
>>>     started at PD=801018 stopped at PD=850829
>>>File 703 processing for PD=  : PD=20021008
>>>     started at PD=880531 stopped at PD=930517
>>>File 704 processing for PD=  : PD=20021008
>>>     started at PD=890101 stopped at PD=910916
>>>File 713 processing for PD=  : PD=20021008
>>>     started at PD=880117 stopped at PD=910825
>>>File 714 processing for PD=  : PD=20021008
>>>     started at PD=900903 stopped at PD=930603
>>>File 715 processing for PD=  : PD=20021008
>>>     started at PD=890103 stopped at PD=940722
Processed  40 of  59 files ...
>>>File 735 processing for PD=  : PD=20021008
>>>     started at PD=25UARY stopped at PD=940520
>>>Range processing error. Please check input.
>>>I/O error in file 477
? t s7/3,k/1-4

 7/3,K/1     (Item 1 from file: 16)
DIALOG(R)File  16:Gale Group PROMT(R)
(c) 2008 The Gale Group. All rts. reserv.

13203968    Supplier Number: 146680865  (USE FORMAT 7 FOR FULLTEXT)
NERA Economic Consulting Announces Range of Opening Prices, Volume, and
  Load Caps for the Illinois Auction.
PR Newswire, pNA
June 6, 2006
Language:  English    Record Type:  Fulltext
Document Type: Newswire; Trade
Word Count:   838

...     tranches. Each tranche is a block of approximately 50 MW of peak
demand.
      The Illinois Auction will be conducted as a simultaneous
, multiple round, descending clock auction.
      * The Illinois Auction is called simultaneous because bidders bid to
        supply all customer types and all contract terms at the same time

      * The Illinois Auction is a multiple round
 process because bidders have
        multiple opportunities to place and revise their bids

      * The Illinois Auction...
```

7/3,K/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2008 The Gale Group. All rts. reserv.

10200865 Supplier Number: 92352087 (USE FORMAT 7 FOR FULLTEXT)
Auctioning electricity: New Jersey applies advanced economic theory to
power procurement. (Marketing).
Salant, David; Loxley, Colin
Energy, v27, n3, p37(3)
Summer, 2002
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 2752

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...government agency allocation. An auction was employed that represents the first ever application of the Simultaneous Descending Clock Auction (SDCA) for power procurement.

This auction was a modification of the Simultaneous Multiple Round (SMR) auction format adapted specifically for the needs of the New Jersey electricity restructuring. While...

...SDCA used in New Jersey was based heavily on the successful use of the simultaneous multiple round (SMR) design in auctions for spectrum worldwide, and the use of the SMR design for...is clearly a less transparent, and arguably less efficient, auction than is an open simultaneous, multiple round auction, where bidders and bids are readily observed by the interested parties.

However, the design...

7/3,K/3 (Item 1 from file: 613)
DIALOG(R)File 613:PR Newswire
(c) 2008 PR Newswire Association Inc. All rts. reserv.

0002078263 ICB6C6CB0F56A11DA8DEDD200DEDA80EB (USE FORMAT 7 FOR FULLTEXT)
NERA Economic Consulting Announces Range of Opening Prices, Volume, and Load Caps for the Illinois Auction Visit www.illinois-auction.com
PR Newswire
Tuesday, June 6, 2006 T14:32:00Z
JOURNAL CODE: PR LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
DOCUMENT TYPE: NEWSWIRE
WORD COUNT: 911

NERA Economic Consulting

The Illinois Auction will be conducted as a simultaneous,
multiple round, descending clock auction.

* The Illinois Auction is called simultaneous because bidders bid to

supply all customer types and all contract terms at the same time

* The Illinois Auction is a multiple round process because
bidders have
multiple opportunities to place and revise their bids

* The Illinois Auction...

7/3,K/4 (Item 1 from file: 278)
DIALOG(R)File 278:Ei Compendex(R)
(c) 2008 Elsevier Eng. Info. Inc. All rts. reserv.

09177426 E.I. No: EIP02447166183
Title: Auctioning electicity
Author: Salant, David; Loxley, Colin
Source: Energy (Norwalk, Connecticut) v 27 n 3 Summer 2002. p 37-39
Publication Year: 2002
CODEN: ENGYD4 ISSN: 0149-9386
Language: English

Abstract: An auction employed that represented the application of the simultaneous descending clock auction (SDCA) for power procurement was presented. The auction was a modification of the simultaneous multiple round (SMR) auction format adapted specifically for the needs of the New Jersey electricity restructuring. Implementing...

```
? s s7 and (switch (1n) request)
            4  S7
      2019433  SWITCH
      3525623  REQUEST
         1232  SWITCH(1N)REQUEST
    S8      0  S7 AND (SWITCH (1N) REQUEST)
? s s7 and (withdrawn (1n) tranches)
            4  S7
       587333  WITHDRAWN
       110648  TRANCHES
            7  WITHDRAWN(1N)TRANCHES
```

```
     S9      0  S7 AND (WITHDRAWN (1N) TRANCHES)
? t s7/7,k/2
```

 7/7,K/2   (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2008 The Gale Group. All rts. reserv.

10200865   Supplier Number: 92352087 (THIS IS THE FULLTEXT)
Auctioning electricity: New Jersey applies advanced economic theory to power procurement. (Marketing).
Salant, David; Loxley, Colin
Energy, v27, n3, p37(3)
Summer, 2002
TEXT:

On February 13th, 2002, New Jersey fully introduced a market process to replace government agency allocation. An auction was employed that represents the first ever application of the Simultaneous Descending Clock Auction (SDCA) for power procurement.

This auction was a modification of the Simultaneous Multiple Round (SMR) auction format adapted specifically for the needs of the New Jersey electricity restructuring. While this was not the first auction for "default service" or "provider of last resort" obligations it was the first time that advanced principles of economic auction theory were successfully applied in the U.S. electricity sector, and is arguably one of the more successful applications of auction theory in any regulated industry.

The need for new supply-contracting arrangements (e.g., auctions) arose from the electricity restructuring that has occurred across the U.S. over the past twenty or so years. A key aim of restructuring is to replace the regulation of vertically integrated investor-owned utilities with a more competitive marketplace.

To this end, regulatory agencies across the country have encouraged, and sometimes required, utilities to split ownership, or at least control, of generation functions from those related to electrical transmission and distribution. In some places this has resulted in utility divestitures of generating assets, while in others utilities have structurally separated their generating assets into separately managed entities. As a result, in many states, the electric distribution companies (EDCs) no longer produce the power for their customers' energy needs, and must make formal contractual arrangements for these services to be provided.

Although the goal of regulation is to provide consumers with access to multiple service providers, consumers may fail to choose an alternative service provider for basic generation services or may not have access to competitive, third-party suppliers. In these situations, the idea of "default service" comes into play since it is always present when retail competition is introduced in combination with restructuring at the wholesale level. "Default service" is simply the energy supply service provided to those customers who are not being served by competitive "third-party" suppliers, and therefore must typically be provided (at least initially) by the EDC. Default service is typically provided at rates that are regulated and fixed for some period of time by the regulator.

The supply contract arrangements can take various forms. Since, in most cases, end user rates continue to be regulated by state utility commissions, the open market spot purchase of power, with a direct pass through of the costs to end users, has not been a realistic option. And the option of consumers contracting separately with competitive suppliers has not proved to be very practical for most customers for a variety of reasons. This means that the utilities have been left with a continuing obligation to provide power to consumers who either never switched, who have switched back or who have been dropped by their supplier. Thus, the utilities have been left in a position of having to purchase power on behalf of their end users, subject to regulatory review (with hindsight) of the procurement process.

Crew and Kleindorfer (see Crew, Michael and Paul Kleindorfer, "Regulatory Economics: Twenty Years of Progress?" in Journal of Regulatory Economics, Vol. 21, No. 1, January 2002, p. 15.), among others, have observed that "the default service obligation is arguably one of the most difficult problems faced in regulatory economics". In particular, the "triple-threat" of rate-caps, the ability of customers to switch back and forth, and extreme volatility in wholesale markets and prices, makes this problem a potential "lose-lose" proposition for the EDC and creates the potential for conflict with the regulators as they strive to ensure "reasonable" prices.

Implementing a default service auction is an elaborate process that requires careful choreography. The New Jersey utilities, and particularly PSE&G, led the implementation effort for BGS. Utilities in other states, most notably California, have tried to organize similar efforts, but with less success. In other cases, such as Texas, the effort has had comparable success. Of course, there were other differences. In California, the legislative mandate resulted in the creation of the CALPX, for day-ahead transactions.

The three investor-owned utilities were required to purchase most of their energy needs in that market. In Texas, the utilities have been required to sell off 15% of their generating capacity. They have been selling one-year, two-year and monthly energy entitlements, for baseload, gas cyclic, gas intermediate and peaking capacity. In each of these three states a few utilities led the effort--in New Jersey it was Conectiv, GPU Energy, PSE&G and RECO; in Texas, AEP, Reliant and TXU; and in California, it was PGE, Sempra and Southern California Edison.

Creating Competition

In New Jersey, the EDCs were faced with the challenge of buying the right amount and hourly shape of power (so as to serve load that varies from hour to hour and day to day--i.e., the load shape) at prices that the regulator would consider competitive and therefore "prudent." Further compounding the situation was the fact that the utilities were faced with deciding whether (and for how long) to buy their requirements as "forward" contracts or as a mixture with short-term purchases. The New Jersey auction for Basic Generation Services (BGS) was the mechanism whereby the New Jersey EDCs secured contracts to serve this default service obligation.

The BGS auction began February 4 and ended February 13 of 2002. In that auction, the four New Jersey utilities, Conectiv, GPU Energy, PSE&G and Rockland Electric secured one-year forward contracts for approximately 17,000 MW of forecast peak load at what are widely regarded as competitive and reasonable prices. More than 20 bidders competed vigorously for the opportunity to serve the New Jersey BGS load. There were 15 winners. The total value of the auction exceeds $4 billion.

The design of the SDCA used in New Jersey was based heavily on the successful use of the simultaneous multiple round (SMR) design in auctions for spectrum worldwide, and the use of the SMR design for selling electricity, in the form of Power Purchase Arrangements, in Canada. Virtually all these auctions allowed bidders to name prices. In contrast, in the New Jersey auction, a "clock" set the prices of the different products while the bidders named the quantities, and the auctioneer set the rates at which the clock prices ticked down. Variations of the clock auction format have recently been introduced for spectrum auctions, and more recently in France for Virtual Power Plants (VPPs), and for energy entitlements in Texas. These auctions have all been ascending price forward auctions for selling assets. The New Jersey BGS auction was a descending price reverse auction for purchasing energy tranches.

It is important to note that, in all of these situations, options other than auctions were available. Indeed, only over the last decade has any regulatory authority contemplated the use of open auctions instead of the still much more common alternative of a negotiated agreement on price, or the more traditional two-stage bidding process. Both of these are likely to require extensive regulatory review.

A two-stage bidding process involves bidders submitting qualifying offers containing material about their offers in addition to, and sometimes instead of, price. The second stage often includes negotiations between the auction administrator and the qualified bidders. The second stage negotiations also usually include monetary proposals as well as non-monetary terms. After a lengthy negotiation, the auction manager selects a winner, using whatever criteria are deemed appropriate. This process is clearly a less transparent, and arguably less efficient, auction than is an open simultaneous, multiple round auction, where bidders and bids are readily observed by the interested parties.

However, the design of the auction can be crucial to the outcome. Properly designed auctions, such as the SDCA, are both more transparent and more efficient than traditional two-stage bidding processes and bilateral negotiated agreements. One impediment to the use of auctions is the essentially unlimited number of possible designs from which to choose--and the fact that the auction design can have a significant effect on the outcome. Fortunately, recent theoretical analysis and a growing body of experience can provide an increasingly reliable guide to auction design.

Among the criteria that led to the choice of an SDCA auction in New Jersey was the need to be able to divide the load, based on competition, among several suppliers. The final outcome, with 15 winning bidders and each EDC being served by a different set of bidders, would have been difficult, if not impossible, to achieve through one of the alternative procurement processes.

In addition, such an outcome would have been difficult to achieve in a one-shot sealed bid, or in a sequential auction of the tranches. The BGS auction, by limiting the ability of any one entity to exceed pre-specified load caps, also helped promote post-auction efficiency and competition. The key goals--minimizing costs, maximizing economic efficiency, and ensuring transparency--were the reasons behind the choice of the SDCA format.

Implications

The experience with the New .Jersey BGS auction is invaluable. It was tremendously successful. However, it cannot simply be carbon copied to other states or even other years in New Jersey. What follows is a summary of the important features of the BGS auction that made the use of the SDCA appropriate.

A limited number of products simplified the design tremendously. The SDCA would have bogged down, and been much less practical to implement, with more than a half dozen or a dozen products. More products mean many more disallowed switches, and many of the products would be just subscribed in many rounds. The more complex the auction, the greater are the entry barriers and the fewer are the bidders.

All tranches were for one year. Another possibility was to have specified some one-year tranches and other tranches of longer duration. Increasing the number of products by auctioning tranches of different durations would have complicated the implementation of the switching provisions and likely have slowed the auction excessively. A multi-year approach would also have drastically increased the migration-volume risk for the future year(s), since customers' rates for the future year(s) are not yet known. There is also the problem of the "right" discount rate for future versus current prices.

All EDCs submitted one proposal. The fact that the EDCs took a uniform approach was quite important. First, it meant that the bidders had relatively little choice but to make the most serious bids in the auction. Second, there was no need for bidders to try to arbitrage across bidding processes. This greatly improved the efficiency of the outcome and undoubtedly led to lower prices for all the EDCs' tranches. It also significantly reduced the total transaction costs of all parties relative to the auction size.

Sufficient lead-time and financial arrangements were planned. This auction took a fair amount of time to set up. It could not have been done on short notice. The agreement between the EDCs and the Board facilitated the financial arrangements needed to ensure the process was completed. It took over 12 months from when the EDCs first began consider various auction alternatives to the conclusion of the auction and the regulatory review and approval of the process.

Other states have different arrangements. Other states have much different approaches to default service. This approach is not likely to be of any value for a reverse auction when the states do not require divestiture of a significant fraction of generating assets. Other approaches are needed in these states. In particular, a retail transfer of customers and customer account services is much more complex.

Bids were only for a uniform annual price-other features, for example, credit, were fixed and uniform across EDCs. In a multi-attribute auction, either the bids are evaluated subjectively or using a weighting scheme subject to gaming. The EDCs had to seriously consider whether seasonal pricing, for example, a summer/ winter differential or even monthly differential, would better reflect actual market conditions. Ultimately the concerns about strategic bidding and complexity, and the impossibility of forecasting the "right" weighting, led to the uniform price approach. For the bidders, the fact that they did not have to deal with EDC-specific metering, billing, losses, collections, etc. simplified the issue and reduced risk significantly.

Moving forward, the major issue to be addressed--in New Jersey and elsewhere--is adapting the process to allow the customers' rates to adjust to wholesale market conditions generally, and specifically to adjust rates to fluctuations and differences in the costs to serve different groups of customers at different times. The challenge is that regulatory authorities want to encourage competitive markets while at the same time there is a perceived need to protect customers from the price volatility that is typical in such markets.

It is likely that a solution will be found, in part. from improved metering, which would allow energy suppliers to adjust customers' energy prices according to a market reference index and thereby keep these prices more closely aligned with market fluctuations. Improved markets and other opportunities for trading, such as the BGS auction, are integral parts of the solution as such markets allow all parties to observe market prices directly and result in more efficient allocations.

RELATED ARTICLE: Tapping unused line capacity.

A new device developed by EDM International, Inc. (4001 Automation Way, Fort Collins, CO 80525; Tel: 970/204-4001, Fax: 970/204-4007; Email: info@edmlink.com) and Southwest Research Institute (SwRI, 6220 Culebra Rd., P.O. Drawer 28510, San Antonio, TX 78228-0510; Tel: 210/684-5111) will allow the nation's energy companies to identify the hidden capacity of their transmission lines and significantly increase their power flow.

Government codes require transmission lines to maintain a safe clearance from the ground and other structures, but heat caused by the current flowing through the electrical resistance in the lines causes the lines to expand and sag.

Factors such as line tension, weather conditions, and anticipated electrical loads are considered in the design of transmission lines to ensure that the lines have enough capacity to comply with codes. Since most transmission lines are not regularly monitored, the design of these lines is often conservative. As a result, lines are built with power transmission capacity that is rarely used. Studies show that transmission lines could carry from 5 to 20% more power.

The video sagometer, developed by SwRI and EDM International, Inc. with funding from EPRI and California Energy Commission (CEC) can be used to monitor ground clearance of power lines in real time. "The video sagometer is the only technology available that directly measures line clearance, or `sag,' providing real-time information regarding the capacity of a transmission line," says Glenn Light, director of the Institute's Sensor Systems and Nondestructive Evaluation Technology Department. "This product gives a utility the capability to provide both safe and efficient operation of power lines."

The video sagometer consists of a video camera in sealed, weatherized housing and mounted on any transmission structure or nearby pole. A "target" made of a simple reflective surface is secured to the transmission line. A low-power LED illuminator mounted with the camera generates a beam that illuminates the target at night. A video signal is sent to a digital processor, which calculates ground clearance. The data can be transmitted in real time by telemetry or logged in a data logger for historical study. "It allows a utility to transport maximum power during high-usage times in a safe manner," Light says.

By David Salant, Senior Vice President, NERA and Colin Loxley, PSEG. Adapted from Default Service Auctions, published by NERA in June 2002.

COPYRIGHT 2002 Business Communications Company, Inc.
COPYRIGHT 2002 Gale Group

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...government agency allocation. An auction was employed that represents the first ever application of the Simultaneous Descending Clock Auction (SDCA) for power procurement.

This auction was a modification of the Simultaneous Multiple Round (SMR) auction format adapted specifically for the needs of the New Jersey electricity restructuring. While...

...SDCA used in New Jersey was based heavily on the successful use of the simultaneous multiple round (SMR) design in auctions for spectrum worldwide, and the use of the SMR design for...is clearly a less transparent, and arguably less efficient, auction than is an open simultaneous, multiple round auction, where bidders and bids are readily observed by the interested parties.

However, the design...
? t s7/7,k/4

7/7,K/4 (Item 1 from file: 278)
DIALOG(R)File 278:Ei Compendex(R)
(c) 2008 Elsevier Eng. Info. Inc. All rts. reserv.

09177426 E.I. No: EIP02447166183
Title: Auctioning electicity
Author: Salant, David; Loxley, Colin
Source: Energy (Norwalk, Connecticut) v 27 n 3 Summer 2002. p 37-39
Publication Year: 2002
CODEN: ENGYD4 ISSN: 0149-9386
Language: English
Document Type: JA; (Journal Article) Treatment: T; (Theoretical)
Journal Announcement: 0211W1

Abstract: An auction employed that represented the application of the simultaneous descending clock auction (SDCA) for power procurement was presented. The auction was a modification of the simultaneous multiple round (SMR) auction format adapted specifically for the needs of the New Jersey electricity restructuring. Implementing a default service auction was an elaborate process that required careful choreography. (Edited abstract)

Abstract: An auction employed that represented the application of the simultaneous descending clock auction (SDCA) for power procurement was presented. The auction was a modification of the simultaneous multiple round (SMR) auction format adapted specifically for the needs of the New Jersey electricity restructuring. Implementing...